

FIG. 1

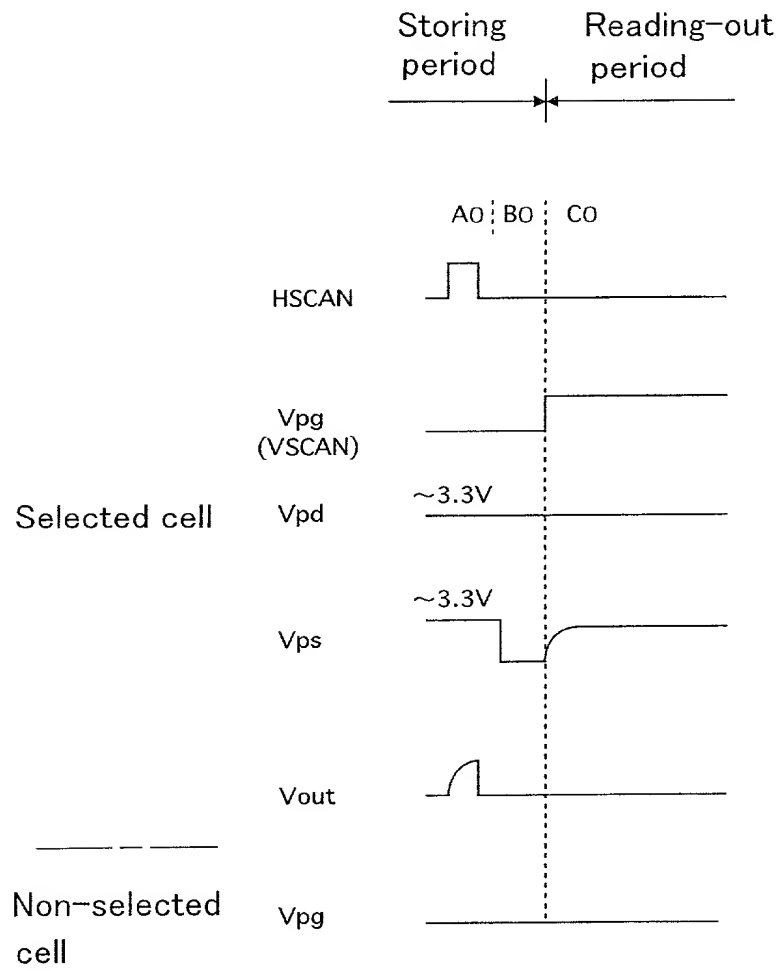


FIG. 2

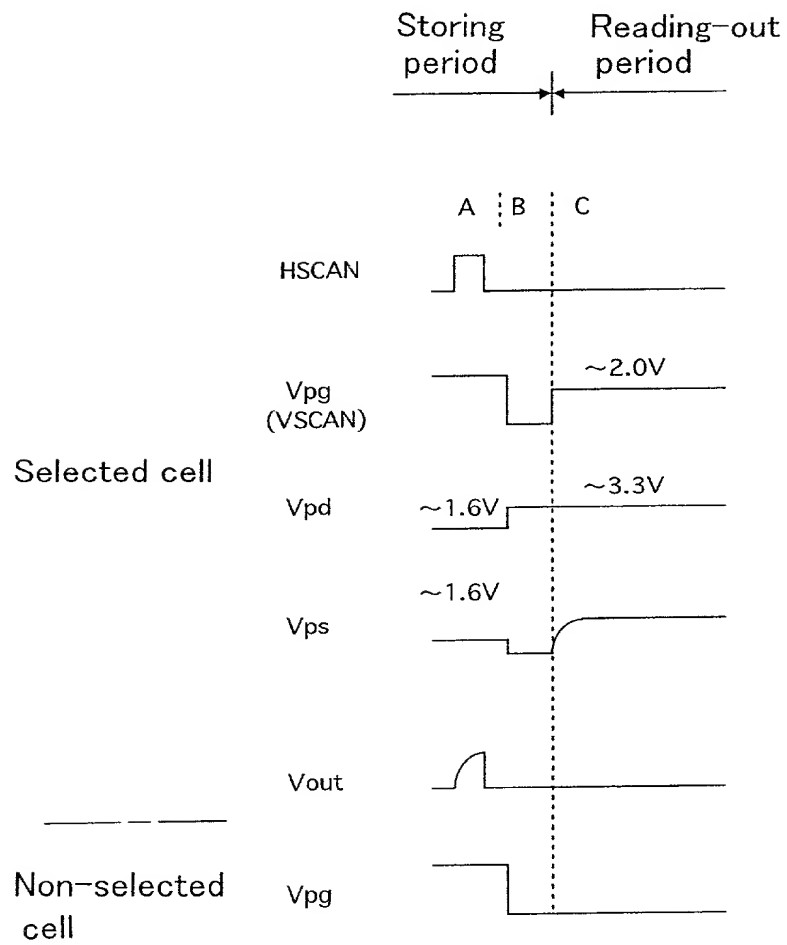


FIG. 3A

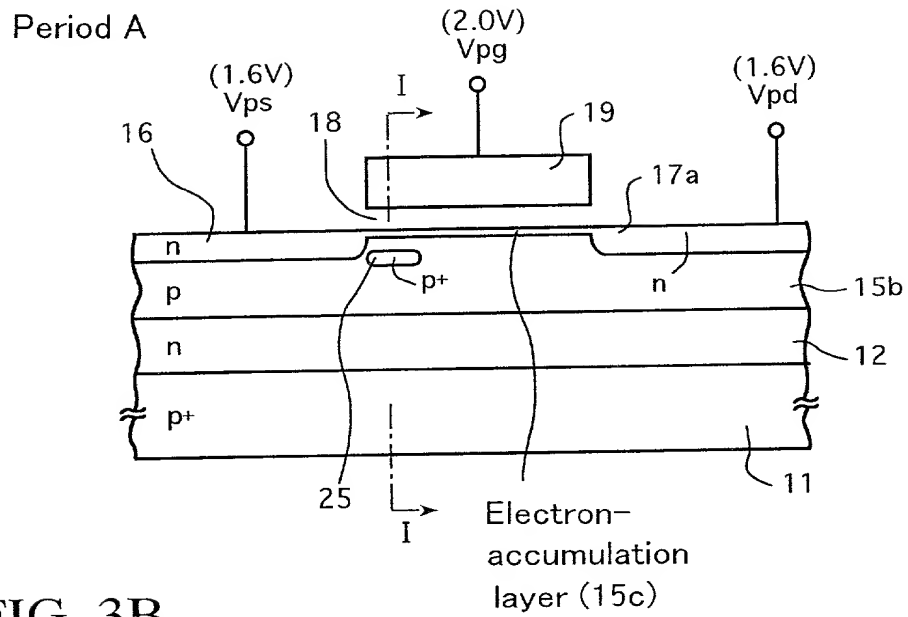


FIG. 3B

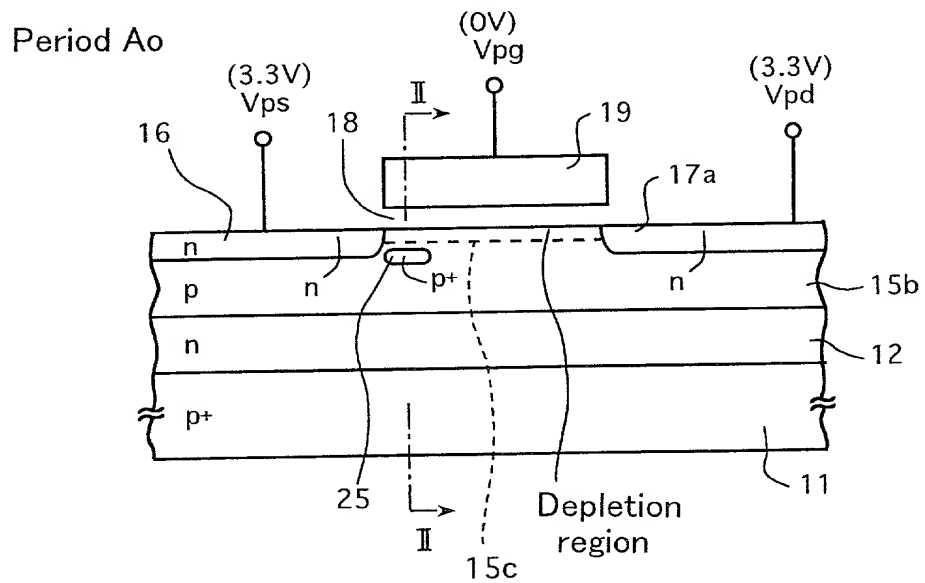


FIG. 4A

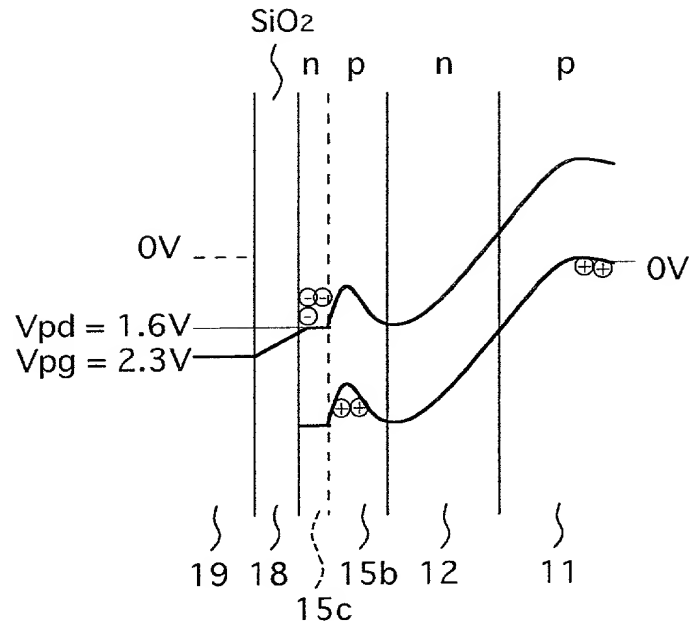


FIG. 4B

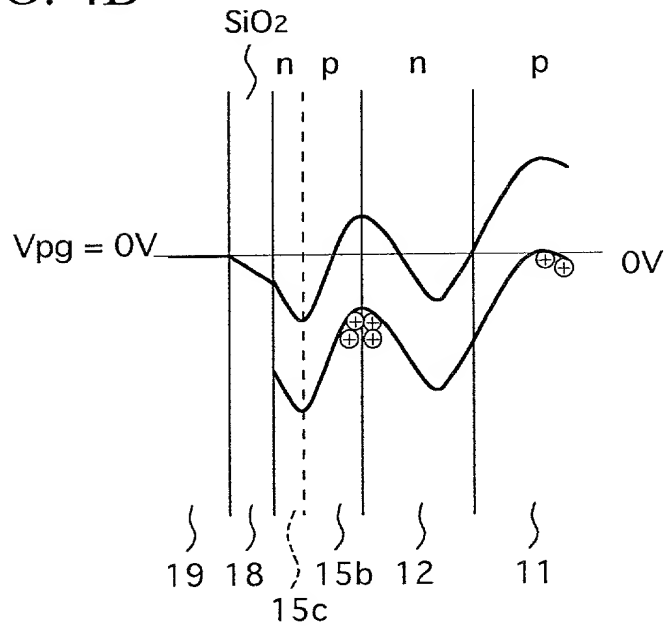


FIG. 5

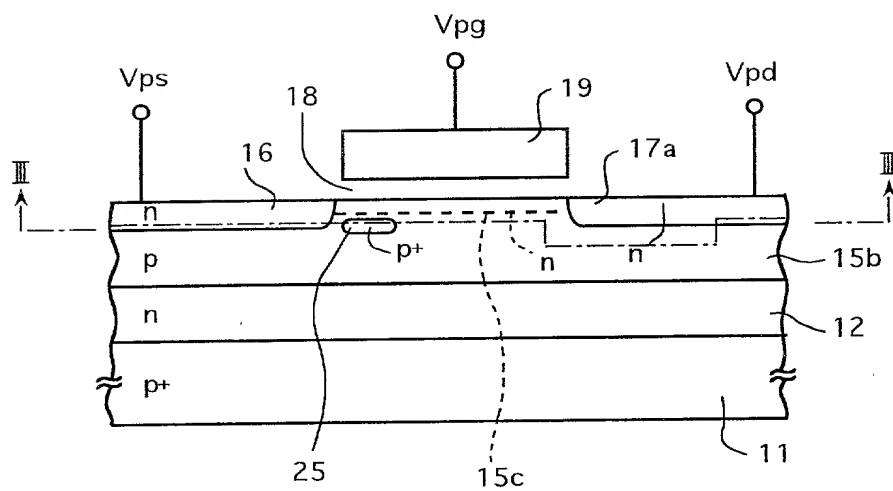


FIG. 6A

Period A

$$V_{pg} = 2.5V$$

$$V_{ps} = 1.6V$$

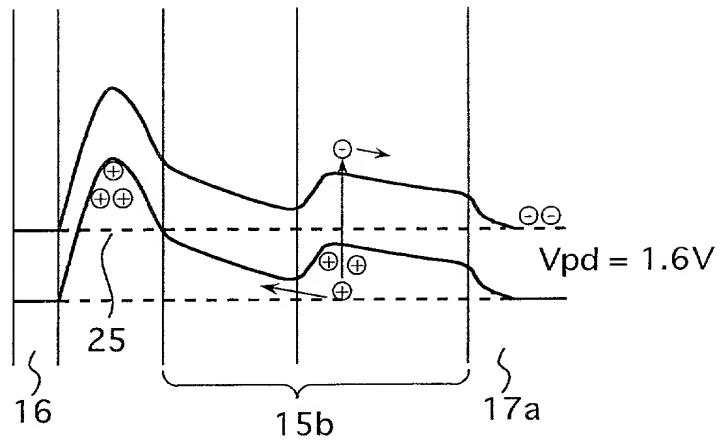


FIG. 6B

Period B

$$V_{pg} = 0V$$

$$V_{ps} = 0V$$

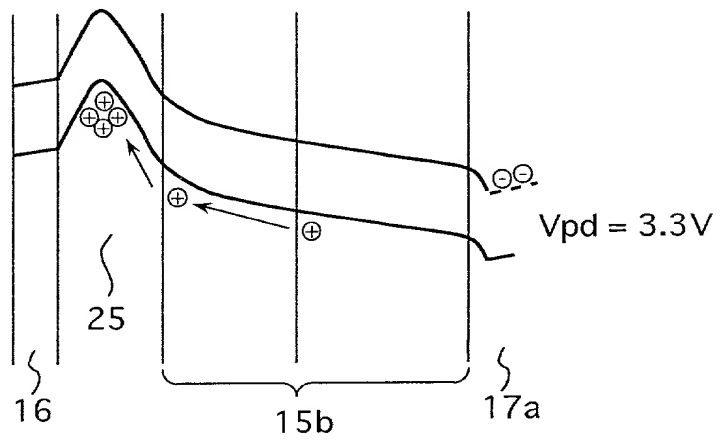


FIG. 6C

Period C

$$V_{pg} = 2V$$

$$V_{ps} = V_{th}$$

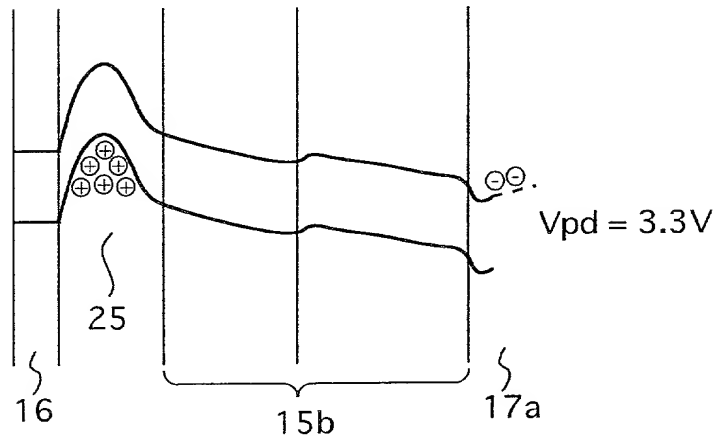


FIG. 7

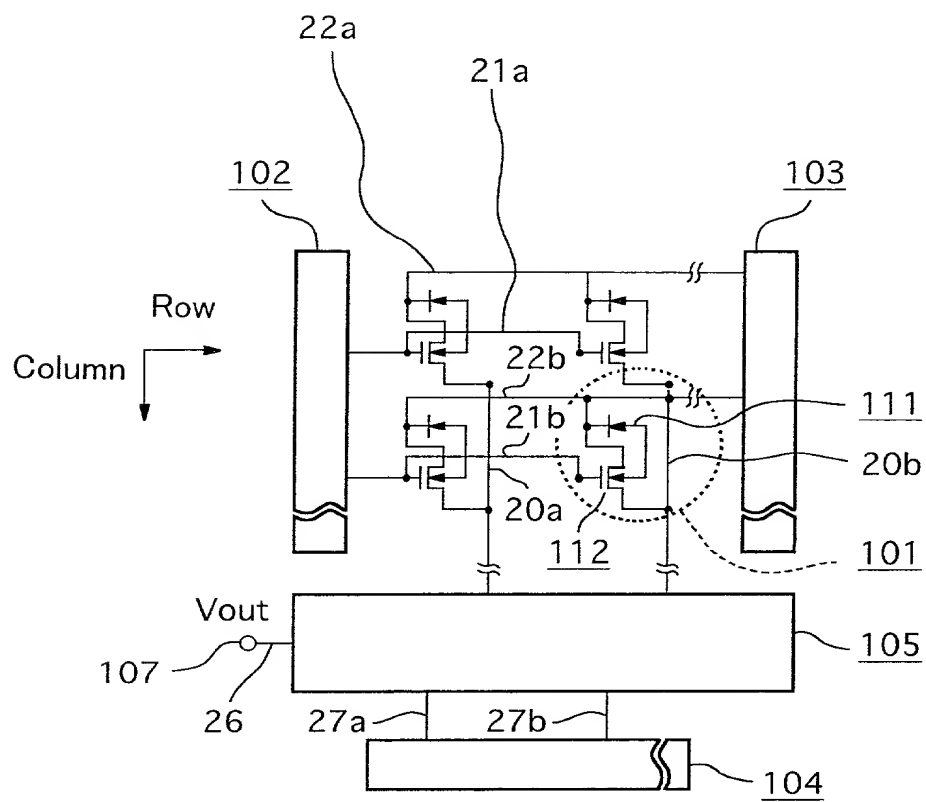


Table 1. Demographic characteristics of the study population	
Age (years)	65.2 ± 1.2
Gender (male/female)	102/108
Education (years)	12.5 ± 0.5
Marital status (married/divorced/widowed)	150/30/20
Occupation (retired/working)	150/30
Income (USD/month)	1,200 ± 100
Comorbidities (hypertension/diabetes/cholesterol)	80/40/60
Medication (antidepressants/antipsychotics)	120/20
Alcohol consumption (yes/no)	30/170
Smoking status (current/former/never)	20/80/160
Family history (depression/schizophrenia)	40/20
Duration of illness (years)	10.5 ± 2.0
Previous hospitalizations (yes/no)	100/80
Current symptoms (depression/schizophrenia)	150/30
Functional status (independent/dependent)	120/10
Social support (strong/weak)	80/120
Quality of life (high/low)	100/100
Healthcare utilization (frequent/infrequent)	60/140
Adherence to treatment (yes/no)	120/80
Stress levels (high/low)	70/130
Life satisfaction (high/low)	90/110
Overall health (good/poor)	110/100
Physical activity (regular/irregular)	80/120
Dietary habits (healthy/unhealthy)	90/110
Sleep patterns (regular/irregular)	100/100
Mood stability (stable/unstable)	110/100
Thought clarity (clear/confused)	120/80
Emotional control (good/poor)	100/100
Interpersonal relationships (positive/negative)	110/100
Work performance (good/poor)	80/120
Financial stability (stable/unstable)	90/110
Legal issues (yes/no)	20/180
Criminal record (yes/no)	10/190
Substance use (drugs/alcohol)	10/190
Self-harm history (yes/no)	20/180
Suicidal thoughts (yes/no)	10/190
Religious beliefs (strong/weak)	100/100
Cultural background (diverse)	190
Geographical location (urban/rural)	150/40
Climate (temperate/tropical)	100/100
Seasonal variations (yes/no)	190
Time of day (day/night)	190
Weather conditions (sunny/rainy)	190
Environmental factors (noise/pollution)	190
Community resources (available/unavailable)	190
Healthcare access (easy/difficult)	190
Transportation (public/private)	190
Health insurance (yes/no)	180/10
Out-of-pocket expenses (high/low)	100/100
Healthcare satisfaction (high/low)	110/100
Overall study findings (positive/negative)	190

